

Cancel claims 1-3 as shown in the following listing of claims, which replaces all previous listings and versions of claims.

1. (canceled)

2. (canceled)

3. (canceled)

4. (previously presented) A pulse wave detecting apparatus comprising:

a signal detecting unit that detects a pulse wave and outputs pulse signals associated therewith;

a signal sampling process unit that samples the pulse signals from the signal detecting unit at a first frequency and sequentially outputs resultant signals;

an averaging process unit that sequentially averages without duplication every predetermined number of signals from the signal sampling process unit and sequentially outputs resultant signals at a second frequency which is lower than the first frequency;

a signal Fourier transform process unit that performs a Fourier transform process on the signals from the averaging process unit; and

a pulse rate calculation process unit that

calculates a pulse rate based on the result of the process at the signal Fourier transform process unit.

5. (previously presented) A pulse wave detecting apparatus according to claim 4, further comprising;

a noise detecting unit that detects kinetic noises and outputs noise signals associated therewith;

a noise sampling process unit that samples the noise signals from the noise detecting unit at the second frequency and sequentially outputs resultant signals; and

a noise Fourier transform process unit that performs a Fourier transform process on the signals from the noise sampling process unit;

wherein the pulse rate calculation process unit calculates a pulse rate based on signals output by the signal Fourier transform process unit and the noise Fourier transform process unit.

6. (previously presented) A pulse wave detecting apparatus according to claim 4, wherein the first frequency is n times (n is an integer equal to or greater than 2) the second frequency and wherein the averaging process unit averages every n signals from the signal sampling process unit in the order of input and sequentially outputs signals obtained through the averaging.

7. (previously presented) A pulse wave detecting apparatus according to claim 4, wherein the second frequency is 2^m Hz (m is a positive integer).